

## REMARKS

In view of the preceding amendments and the following comments, and pursuant to 37 C.F.R. § 1.114, Applicant respectfully requests reconsideration of the Office Action.

### Summary of the Amendment

Applicant has amended claims 48-52, 56, 57, 59, and 61-64. Applicant has cancelled claims 53-55, and claims 1-47 were previously cancelled. Support for the amendments can be found in the originally filed claims and the Application, at least at ¶¶ 0105, 0109, 0110-0112, and 0119, and Figures 2, 6, and 10. The amendments do not add new matter. The Applicant respectfully requests reconsideration of pending claims 48-52, 56-64, and allowance of the present application in view of the amendments and the following remarks.

### Detailed Remarks

#### I. Rejections Under 35 U.S.C. § 103

The Office Action rejected claims 48, 49, 52, and 61, under 35 U.S.C. § 103(a) as unpatentable over Hoffman et al. (U.S. Patent No. 7,152,045) in view of Igaki et al. (U.S. Patent No. 5,109,428). The Office Action rejected claims 62-64, under 35 USC 103(a) as unpatentable over Hoffman in view of Igaki and further in view of Koo et al. (WO 02/12660). The Office Action rejected claims 50-51 and 53-60, under 35 U.S.C. § 103(a) as unpatentable over Hoffman in view of Koo and further in view of Igaki.

#### Claims 48, 49, 52 and 61

Claim 48, as amended, recites, among other features, three features which are set out below together with references to where the features are supported in the present Application.

- *(b) means for, when the database of biometric signatures is not empty, classifying a sequence of biometric signals received by the transmitter sub-system*

*as control information when (bi) the received biometric signals are administrator biometric signals, and (bii) the biometric signals forming the received sequence are of predetermined duration, predetermined quantity, and are input within a predetermined time.*

The present Application, at ¶¶ 0105 and 0109, discloses that when the database is not empty then the first administrator can provide control information to the code entry module by providing a succession of finger presses to the biometric sensor 121, providing that these successive presses are of the appropriate duration, the appropriate quantity, and are input within a predetermined time.

- *(c) means for, when the received sequence of biometric signals is identified as control information, (ci) checking the control information against predetermined control information and (cii) enrolling another user dependent upon a biometric signal from the other user and the checked control information.*

The present Application, at ¶ 0109, discloses that when the aforementioned conditions (bi) and (bii) are met then the controller 107 accepts the presses as potential control information and checks the input information against a stored set of legal control signals. The present Application, at ¶¶ 0110-0111, further discloses one example of how an ordinary user is enrolled when the control information and the checked control information are consistent with this new enrolment.

- *(d) when the received sequence of biometric signals is not identified as control information, (di) matching biometric signals received by the transmitter sub-system against signatures in the database of biometric signatures, and (dii) when a received biometric signal matches a signature in the database sending the accessibility attribute to the receiver.*

The present Application, at ¶ 0112, discloses that in the event that a legitimate sequence of finger presses are not delivered within the predetermined time, then the presses are considered not to be control information and merely to be presses intended to provide access to the controlled item. The Application, at ¶

0119, further discloses how a biometric signal in this category is checked against the signatures in the database, and when a match is found, then an "access" bit is inserted into the access signal which directs the controller 109 in the receiver sub-system 117 to provide access to the controlled item 111.

**HOFFMAN**

The Office Action, at pages 4-5, asserts that Hoffman, at col. 19, ll. 27-36, teaches enrolling biometric signatures into a database, and inherently teaches using a legitimate sequence of one or more biometric signals to enrol each biometric signature.

Hoffman, at col. 19, ll. 27-36, discloses that first, the message "Please place finger on lighted panel" is displayed on the LCD panel and returned to the terminal. The scanner pad is illuminated, prompting the individual to enter his biometric. A <time> value of zero means that there is no limit to the time for biometric scan input. When in scanning mode, a fingerprint scan is taken and given a preliminary analysis by the print quality algorithm. When the scan is not good enough, the BIA continues to take new scans until <time> seconds pass. As time passes and snapshots of the print are taken and analyzed, messages are posted to the LCD screen and sent to the terminal based on the problems detected by the print quality software. When no print of appropriate quality is forthcoming, the BIA returns an error code of time expired, displaying a message to that effect on the LCD. Once the print quality algorithm affirms the quality of the print scan, the print's minutiae are then extracted by the print encoding algorithm. Only a subset of the minutiae are selected at random, with care taken to retain enough sufficient for identification. These minutiae are then ordered randomly, and are placed in the Encoded Biometric Register. Then the BIA responds with the success result code.

Importantly, the user is directed to place their finger on the lighted panel once and the system takes a number of images. Although the user may be directed to place their finger on the lighted panel again when the aforementioned scans do not yield a scan of adequate quality, when a scan of adequate quality is acquired,

further finger presses by the user are not required. The system in Hoffman takes one or more scans in order to attain sufficient biometric quality.

Hoffman does not disclose that the biometric signals forming the received sequence are of predetermined duration, predetermined quantity, and are input within a predetermined time.

Hoffman deals, in the desired scenario, with only one deliberate placement of the user's finger on the lighted panel, and makes no mention or suggestion that the user make a sequence of such placements in which the biometric signals forming the received sequence are of predetermined duration, predetermined quantity, and are input within a predetermined time.

The fact that Hoffman makes a number of scans of the single biometric signal provided by the user is a quite different operation to that recited in the claim. Since the user in Hoffman is only directed to provide one biometric signal, there is no way in which the user has any control over the sequence of biometric signals being input into the system.

Simply put, the user of the arrangement described in Hoffman has no ability to provide biometric signals of predetermined duration, predetermined quantity, and being input within a predetermined time.

**IGAKI**

The Office Action, at page 7, asserts that Igaki, at the Abstract, explicitly teaches using a legitimate sequence of one or more biometric signals to enrol each biometric signature.

The Office Action makes reference to the Abstract in Igaki in this regard, which states that an optical sensor unit optically produces a sequence of fingerprint image data during a single operation of pressing a fingerpad onto an inspection plate.

It is respectfully submitted that Igaki has the same shortcoming as described in regard to Hoffman. Namely, although Igaki makes a number of scans from a single finger press by the user, this is quite a different operation to that recited in

claim 48 as amended. As is the case in Hoffman since the user in Igaki only presses once on the inspection plate, albeit in a direction substantially transverse to the plate and with increasing pressure over a time interval (see Abstract of Igaki), there is no way in which the user has any control over the sequence of fingerprint image data generated during the single operation of pressing a fingerpad.

Simply put, the user of the arrangement described in Igaki has no ability to provide biometric signals of predetermined duration, predetermined quantity, and being input within a predetermined time.

The Office Action makes the proposition that the ordinary skilled artisan would modify Hoffman according to Igaki in order to provide the ability to produce a sequence of fingerprint image data from a single operation of pressing down on the fingerpad (emphasis added).

However, the very fact that the user can and does make use of multiple finger presses in claim 48 as amended which enables the claimed system to classify a sequence of biometric signals received by the transmitter sub-system as control information and, when the received sequence of biometric signals is identified as control information, to check the control information against predetermined control information and enrol another user.

Even supposing that Hoffman were modified by incorporating the teachings of Igaki, the combination of which the Applicant does not concede would be proper, and even if the combination disclosed one or more of the features of claim 48 as amended, which the Applicant respectfully submits the combination does not disclose, the combination does not teach or suggest any of the features (b) – (d) referred to above of claim 48.

Therefore, for at least the reasons noted above, claim 48 as amended is patentable over Hoffman and Igaki, whether the references are considered alone or in combination.

For at least the reasons noted therefore, claim 48 as amended, and the claims that depend directly or indirectly from claim 48 are patentable over the cited references, taken alone or in combination.

Independent claims 49, 52, and 61, as amended, recite features consistent with those referred to above of claim 48 as amended. Accordingly, for at least the reasons noted above, claims 49, 52 and 61, and the claims that depend directly or indirectly from claims 52 and 61 are patentable over the noted references, whether the references are considered alone or in combination.

#### **Claims 62-64**

Regarding dependent claim 62, which depends from claim 61, the Office Action at page 14, concedes that Hoffman and Igaki fail to explicitly teach the additional features recited in those claims, and refers to Koo in this regard.

However, claim 62, as amended, depends from independent claim 61, and for at least the reasons noted above regarding claim 61, claim 62 is patentable over the cited references, taken alone or in combination. Koo does not remedy the deficiencies of Hoffman and Igaki referred to above in regard to the features recited by claim 61, as amended.

Establishment of a *prima facie* case of obviousness requires that the prior art references when combined must teach or suggest all the claim limitations. Even supposing that Hoffman were to be modified by incorporating the teachings of Igaki and Koo, the combination of which the Applicant does not concede would be proper, and even if the combination disclosed one or more of the features of claim 62, as amended, which the Applicant respectfully submits the combination does not disclose, the combination does not teach or suggest any of the features (b) – (d) referred to above and recited by claim 61.

Therefore, for at least the reasons noted, claims 61 and 62, as amended, are patentable over Hoffman, Igaki, and Koo, whether the references are considered alone or in any combination.

Independent claims 63-64, as amended, recite features consistent with those referred to above and recited by claim 61, as amended. Accordingly, for at least the reasons noted, claims 63-64 are patentable over the noted references, whether the references are considered alone or in combination.

**Claims 50-51 and 56-60**

Independent claims 50-51, as amended, recite features consistent with those referred to above and recited by claims 48 and 61, as amended. Accordingly, for at least the reasons noted, claims 50-51 are patentable over the noted references, whether the references are considered alone or in combination. Dependent claims 56-60 that depend from independent claims 48 and 52, either directly or indirectly, are patentable over the noted references, whether the references are considered alone or in combination, for at least the reasons noted above regarding claims 48 and 52.

Even supposing that Hoffman were modified by incorporating the teachings of Igaki and Koo, the combination of which the Applicant does not concede would be proper, and even if the combination disclosed one or more of the features of any of the noted claims above, which the Applicant respectfully submits the combination does not disclose, the combination does not teach or suggest any of the features (b) – (d) referred to above and recited by independent claims 48, 50-52, and 61.

Therefore, for at least the reasons noted above, claims 48, 50-52, and 61, and claims 56-60 that depend from claims 48 and 52, either directly or indirectly, are patentable over Hoffman and Igaki and Koo, whether the references are considered alone or in combination.

### **Conclusion**

In view of the above amendments and remarks, Applicant respectfully submits that this application is in condition for allowance and such action is earnestly requested. If for any reason the Application is not allowable, the Examiner is requested to contact the Applicant's undersigned attorney.

Respectfully submitted,

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